Preventing Common Problems from Occurring When Completing/Submitting NPDES Discharge Monitoring Report (DMR) and State (MMR and MRO) Forms

July 2008

Submitting National Pollutant Discharge Elimination System (NPDES) self-monitoring data to IDEM is an important part of complying with the NPDES permit. When the DMR data is submitted to the correct address, by the correct date, is legible, complete and signed, it can be quickly keyed by data entry operators into the EPA database, so that the NPDES permittee receives credit. When this happens, there are no late date violation codes and no missing data violation codes assigned to that data within the EPA database for that monitoring period and that permit. However, if there are limit exceedances, one of those kinds of violations will ultimately be assigned. The following information is provided in order to prevent unnecessary late, missing, and occasionally mistaken data violations from occurring within the EPA database, per permitted facility.

I. IN GENERAL

1. **Always read the facility permit to determine**:
   - parameters being tested,
   - limits for those parameters,
   - frequency for collecting samples (daily, weekly, monthly, quarterly, semiannually, annually, etc.)
   - types of samples (e.g. grab, 24-hour composite, etc.),
   - reporting units (mg/L MGD, etc.).

   The permit also lists pertinent information about:
   - the receiving stream,
   - outfall numbers/location,
   - seasonal limits,
   - compliance schedules, and
   - compliance and enforcement information.

   The NPDES permit provides definitions (e.g., monthly average, maximum weekly average, bypassing, etc.) which are vital to understanding and interpreting the permit and completing the DMR form.

   Remember, the NPDES permit is the legally binding document and therefore the permittee is bound by the requirements listed in the permit, regardless of whether or not the information is listed on (requested by) the DMR form.

   In addition to completing and submitting the DMR form each monitoring period, Indiana requires an accompanying state form to be completed and submitted. This state form (Monthly Monitoring Report – MMR, or Monthly Report of Operation - MRO) provides additional information about the facility, such as process control actions taken by sanitary dischargers.

2. **Submit forms to the correct address by the correct date:** Submit the original copy of the completed **DMR** and corresponding state form (MMR or MRO) together, along with any required supporting documents, to the following address, postmarked by the 28th of the month following the monitoring period end date on the DMR form:

   Indiana Department of Environmental Management
   Office of Water Quality
   Data & Information Services Section, Mail Code 65-42 DISS
   100 North Senate Avenue
   Indianapolis, IN 46204-2251

   Within a month of being received by IDEM, the DMR data will have been entered into the EPA database.

3. **Know who to contact when you have questions about the DMR or the State forms:** The name of the data manager for your DMR form is listed in the upper right-hand corner of the DMR form, along with their telephone number. If the DMR preparer believes that the DMR does not accurately reflect the permit, the preparer is responsible for notifying the IDEM data manager (by phone or separate correspondence) in order to get the DMR form corrected as soon as possible.

4. **Check the DMR/State forms for completeness and sign and date each DMR and state (MMR/MRO) form before submittal to IDEM:** Before submitting each DMR and MMR/MRO form, the person(s) signing them should review the document carefully for completeness, and then sign and date, in the appropriate blanks. The federal government requires the signature of the authorized agent ("cognizant official") printed and written on the DMR form, along with the date. Indiana requires that both the authorized agent and the certified operator sign and date the state form (MMR or MRO).

5. **Identify changed/revised data on the DMR or State forms -** If data was entered on the original DMR incorrectly and submitted, a corrected or revised DMR needs to be submitted. To do so, make a copy of the original DMR, check the "Revised" box near the address on the upper left-hand corner of the DMR, highlight the revisions, and send it to the address above. If an MMR or MRO form needs to be re-submitted due to changes/corrections, write the words "Corrected Copy" or "Revised Copy" across the top of the State form, highlight the changes, and submit to the address above. All changes/corrections should be initialed by the DMR preparer. The revised DMR/State form should be signed and dated and submitted to the IDEM address listed above, as soon as possible.

II. COMPLETING THE DMR FORM

Select the correct DMR form for each monitoring period - The person completing the DMR should first check the monitoring period at the top of the form to ensure that the correct DMR form is being used, since the end date at the top of the page is the one used to enter the data into the EPA database. If the DMR preparer notices that he/she does not have a DMR form for the current monitoring period per applicable outfall (Discharge Number), he/she should call the data manager listed at the upper right-hand corner of his/her DMR in order to get one as soon as possible.

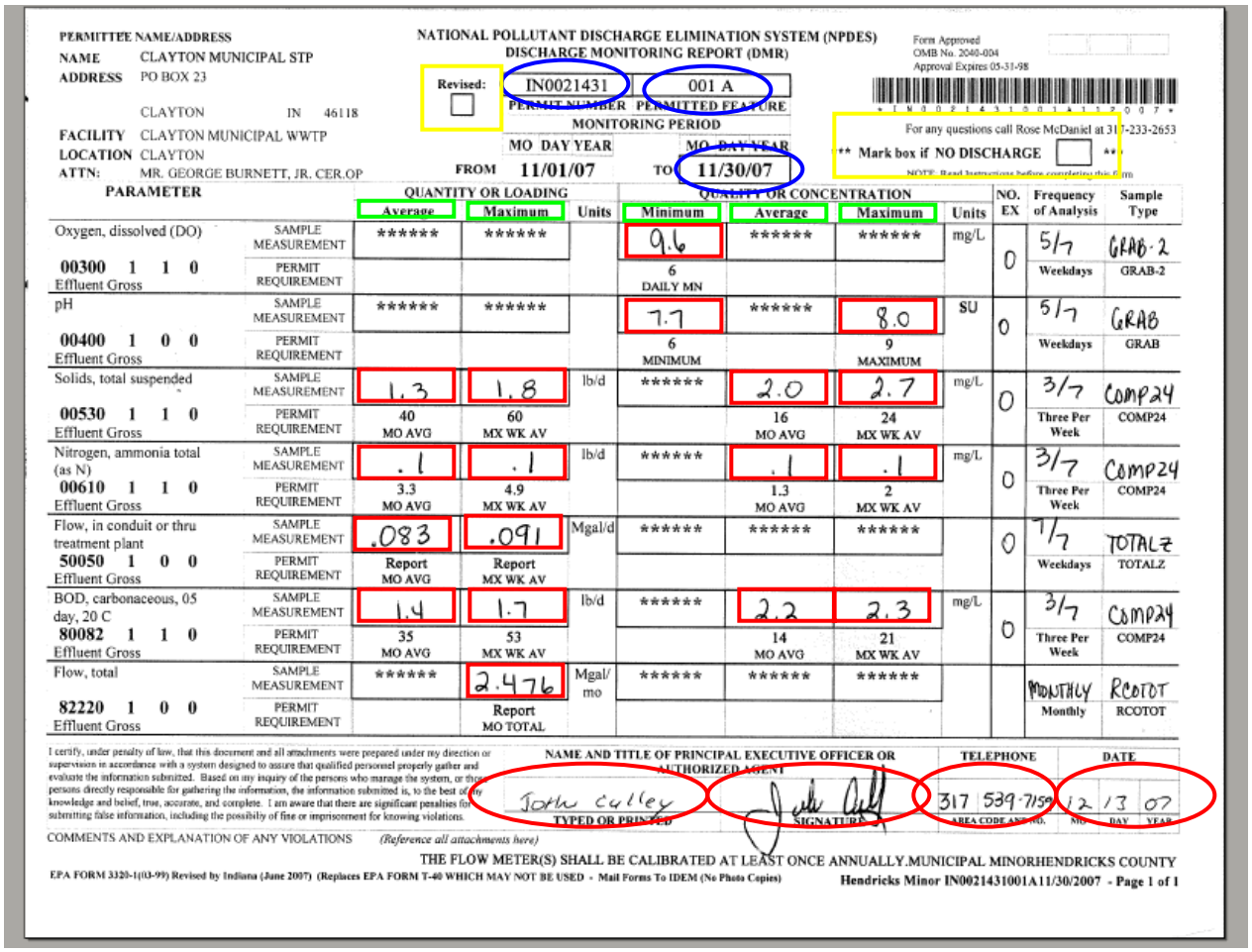
Correctly indicate if there has been no discharge for the monitoring period. Regardless of whether the DMR is to be submitted monthly, quarterly, annually, etc., if there has been no effluent discharge for that monitoring period (for that facility's outfall) indicate this by checking the "No Discharge" box in the upper right-hand corner of the DMR form. This will mean that no effluent from the NPDES facility entered the receiving stream (or in some cases, groundwater) listed in the permit, from that outfall. The only other thing required for most "No Discharge" DMRs is the printed name, signature, phone number, and date at the bottom of the DMR, as well as the completed corresponding state form for submittal. The exception would be that if any influent and/or intermediate process information is required on the DMR then that information must be supplied on the DMR even though there is no effluent discharge. There is no need to fill in every blank on the DMR with the words "No Discharge" as long as the "No Discharge" box in the upper right corner has been checked or filled in.

For DMRs where discharge occurred, fully complete the blanks for each parameter on the DMR form by carefully transferring the summary data from the state MRO or MMR form.

- The DMR form is printed by IDEM using the federal format. Each DMR page has up to seven parameters (e.g., pH, total suspended solids, flow, etc.) listed vertically, per each outfall. The corresponding State Form (MMR or MRO) will have the same parameters listed horizontally (and sometimes additional parameters), with summary data (average, minimum, maximum) for each parameter at the bottom of each parameter column.
- On the DMR form, each parameter row is split into a "white" row, followed by a "gray" row. The limit value for each parameter is listed in the gray row and should match the limits listed in the permit for that parameter, for that time period. (If they do not, please contact the data person whose name and telephone number are listed in the upper right-hand corner of the DMR.)

- The measurement value for the corresponding parameter for that time period should be entered/placed just above the limit value, in the "white" row. There are five main columns for data in each row; the first two for loading values and the last three for concentration. Any blanks in the white row that contain asterisks (******) indicate that they do not currently pertain to the NPDES permitted facility, and do not need to be filled in, although, again, the permittee is responsible for making sure that this is accurate.

In the following illustration, fields **circled in blue** should be confirmed before filling out the DMR, fields **outlined in green** indicate the main data column headers, fields **outlined in red** must be filled in if there is a discharge, fields **outlined in yellow** need to be completed if they apply, and fields circled in **red** must always be filled in.



PERMITTEE NAME/ADDRESS
NAME CLAYTON MUNICIPAL STP
ADDRESS PO BOX 23
CLAYTON IN 46118
FACILITY CLAYTON MUNICIPAL WWTP
LOCATION CLAYTON
ATTN: MR. GEORGE BURNETT, JR. CER.OP

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised: ☐
IN0021431 — PERMIT NUMBER
001 A — PERMITTED FEATURE
MONITORING PERIOD
MO DAY YEAR — MO DAY YEAR
FROM 11/01/07 TO 11/30/07

For any questions call Rose McDaniel at 317-233-2653
** Mark box if NO DISCHARGE ☐ **

PARAMETER		QUANTITY OR LOADING Average	QUANTITY OR LOADING Maximum	Units	QUALITY OR CONCENTRATION Minimum	QUALITY OR CONCENTRATION Average	QUALITY OR CONCENTRATION Maximum	Units	NO. EX	Frequency of Analysis	Sample Type
Oxygen, dissolved (DO)	SAMPLE MEASUREMENT	******	******		9.6	******	******	mg/L	0	5/7	GRAB-2
00300 1 1 0 Effluent Gross	PERMIT REQUIREMENT				6 DAILY MN					Weekdays	GRAB-2
pH	SAMPLE MEASUREMENT	******	******		7.7	******	8.0	SU	0	5/7	GRAB
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6 MINIMUM		9 MAXIMUM			Weekdays	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	1.3	1.8	lb/d	******	2.0	2.7	mg/L	0	3/7	COMP24
00530 1 1 0 Effluent Gross	PERMIT REQUIREMENT	40 MO AVG	60 MX WK AV			16 MO AVG	24 MX WK AV			Three Per Week	COMP24
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.1	.1	lb/d	******	.1	.1	mg/L	0	3/7	COMP24
00610 1 1 0 Effluent Gross	PERMIT REQUIREMENT	3.3 MO AVG	4.9 MX WK AV			1.3 MO AVG	2 MX WK AV			Three Per Week	COMP24
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.083	.091	Mgal/d	******	******	******		0	7/7	TOTALZ
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Weekdays	TOTALZ
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	1.4	1.7	lb/d	******	2.2	2.3	mg/L	0	3/7	COMP24
80082 1 1 0 Effluent Gross	PERMIT REQUIREMENT	35 MO AVG	53 MX WK AV			14 MO AVG	21 MX WK AV			Three Per Week	COMP24
Flow, total	SAMPLE MEASUREMENT	******	2.476	Mgal/mo	******	******	******			MONTHLY	RCOTOT
82220 1 0 0 Effluent Gross	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: John Culley (TYPED OR PRINTED) — SIGNATURE — TELEPHONE: 317 539-7159 (AREA CODE AND NO.) — DATE: 12 13 07 (MO DAY YEAR)

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE FLOW METER(S) SHALL BE CALIBRATED AT LEAST ONCE ANNUALLY.MUNICIPAL MINORHENDRICKS COUNTY

EPA FORM 3320-1(03-99) Revised by Indiana (June 2007) (Replaces EPA FORM T-40 WHICH MAY NOT BE USED - Mail Forms To IDEM (No Photo Copies)

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<u>Complete all DMR form blanks</u> even for less frequent sampling rates (monthly, quarterly, semiannually and annually) As long as there has been discharge from a particular outfall, make certain that all blanks on the DMR form that are associated with a parameter, and are not filled in with asterisks (******), and have a header of "MINIMUM", "AVERAGE", or "MAXIMUM" have values filled in from the measurements taken during that month/reporting period. When a parameter is required to have two values, such as Minimum and Maximum, or Average and Maximum, but is only required to sample once per monitoring period (month, quarter, 6 months, etc.), <u>all required blanks for that parameter must still be completed</u>, even if the Minimum, Average and/or Maximum values are identical. (because only one sample was collected). If no data was collected for a parameter (e.g., sampling equipment failure) that has a DMR blank required to be completed, a note/letter should accompany the DMR form to explain the reason why there is no data for that parameter, and how the situation has been remedied. When a DMR is incomplete, the required data cannot be entered into the EPA database, and the database assigns a missing information violation, which can eventually lead to enforcement action being taken. Depending on the explanation for missing data, the data entry operator <u>may</u> (or may not) be able to assign a code to that parameter that will excuse the missing data in the EPA database for that monitoring period.

Explain conditionally missing data for individually missing parameters:
Even if the data only has to be reported for certain conditions (e.g., hydrostatic testing, storm water events, etc.) please indicate at the bottom of the DMR (or with an accompanying letter) what condition caused there to be no data reported (e.g., "no hydrostatic testing this month", "no storm water event this month") for an individual parameter. In this way, again, the data entry operator will know if he/she can immediately "excuse" the missing data (in the EPA database) by entering a specific code for that/those parameter/s for that month, so that no false violation codes will be assigned by the EPA database to your data. Also, try to specifically report or explain non-quantified data (and not report abbreviations), per each parameter, because abbreviations can be ambiguous and occasionally N/A is not true for that monitoring period. See examples in the following table:

If the parameter measurement is:	Don't Report:	Do Report:
below detection limit	BDL	"<___" (whatever the lab limit was)
not applicable this monitoring period	N/A	* (explain why-per parameter-at bottom of DMR)
not detected	ND	"<___" (whatever the lab limit was)
not done	ND	* (explain why-per parameter-at bottom of DMR)
not discharged	ND	* (explain why-per parameter-at bottom of DMR)
too numerous to count (e. coli)	TNTC	"63200"

Note: If no data is entered into the EPA database for a parameter that is required for that monitoring period, within a couple of months of the DMR due date, the EPA database assigns a missing data violation for that parameter/permit/month. IDEM data managers check the DMR data entry whenever possible, in order to excuse any missing data that has a valid reason for not being present. However, there is a lot of DMR data to check and the managers do not always catch all the missing data that need special codes. And once the missing data violation is assigned to a data measurement by the EPA database, it cannot always be removed, although it can receive a "resolved" status, once the IDEM data manager enters the correct codes in the database. So, it is best not to have missing data in the first place, if at all possible.

Use "less than" correctly to report data measurements:
For purposes of reporting on the DMR form, the use of the "less than" sign "<" should only be used to report measurements that are less than one of two specific thresholds: the laboratory detection limit threshold or the sampling equipment detection limit threshold for that parameter. It should not be used in order to round numbers (i.e., reporting <2 instead of reporting 1.6), nor to indicate "less than the limit" for that parameter (i.e., reporting <9 for pH instead of reporting 8.8).

1) "<" can be used for daily maximum or maximum weekly average on the DMR form when:
   The maximum measurement for that monitoring period is less than the threshold explained above.

2) "<" can be used when reporting the Average for a parameter on the DMR form if:
   All the measurement values averaged for that monitoring period were less than the above described threshold.

Due to the calculation function used to average numbers on the Excel version of the state forms, using "<" on the state forms will require additional explanation. See the state forms section toward the end of this document.

Use the correct reporting precision:
Be certain to report parameter measurements to the correct significant digit, according to the limits in the permit, keeping in mind the constraints of the measuring equipment and/or laboratory analysis.

Example 1: Dechlorination sampling, listed on DMR forms as "CHLORINE, TOTAL RESIDUAL (TRC) - 50060 1 - EFFLUENT GROSS VALUE", often has a permit limit value of 0.01 or 0.02 mg/L, but the limit value may be overridden by the limit of quantitation for that parameter (as per applicable footnote), which is 0.06 mg/L for Chlorine (TRC). So to enter "0" or even "0.0" would be incorrect for that parameter (except for GLI permits' TRC average, explained later), whereas, 0.05 or <0.06 would have acceptable reporting precision. However, do not report data that is less precise than the instrumentation detection limit (i.e., most residual chlorine measurements should not be reported as <0.01 mg/l because most instruments cannot read residual chlorine data reliably below 0.01mg/l.)

Example 2: If the Average Concentration limit for ammonia nitrogen is 1.1 mg/L and the facility's measurement (as per their lab or equipment) is less than 0.1 mg/L, the correct way to report this data is "<0.1", not "0", not <1.1 and not "<1".

Example 3: Nearly all flow values should have a minimum of three significant digits (i.e., 26,500 gallons per day should be reported as 0.0265 MGD, but not 0.02 or 0.026 million gallons per day).

* To convert gallons per day to million gallons per day (mpg), divide the number of gallons by 1,000,000:
26,500 gal /1,000,000 = 0.026 mgd

Check the units columns to ensure correct reporting:
There is a big difference between reporting gallons per day and millions of gallons per day. There is also a big difference between mg/L and ug/L and ng/L. Make certain that the data being supplied on the DMR/State form is in the correct units and that the units on the DMR form reflect the permit correctly. If they do not, please contact the person listed in the upper right hand corner of the DMR.

Calculate the Quality or Loading Values correctly:
Flow values and loading values are generally reported in one or both of the first two columns on the DMR form. Using information from the State form, loading values should be calculated each day a sample is collected by multiplying the concentration value for the parameter times the discharge flow (taken at the same time/day the parameter was collected) times 8.34 (lbs. per gallon of water).

* Parameter concentration X discharge flow X 8.34 lbs/gallon = loading value

In order to get average loading values the individual (daily or weekly) loading averages must be totaled and divided by the number of average loading values. Do not calculate the average monthly loading values by averaging all of a parameter's concentration measurements, then averaging all the flow values for that month then multiplying their product by 8.34. If using the Excel spreadsheet version of the MRO/MMR (see the web address below), these calculations are automatically being used. Please call the data manager listed in the upper right-hand corner of your DMR form if you have any questions regarding these calculations. Loading calculations are also explained in the EPA User Guide dated March 1985, which can be obtained from the IDEM website (where state forms are displayed), at:
http://www.in.gov/idem/5104.htm

Report the correct Maximum Values - Maximum Weekly Average versus Daily Maximum:
In many of the sanitary permits, parameters such as Flow, Total Suspended Solids (TSS), CBOD5, and Ammonia Nitrogen, are required to report Maximum Weekly Averages, rather than Daily Maximums. Reporting a Daily Maximum for a parameter (per reporting period) simply means to report the highest daily value that a parameter has for that monitoring period. However, Maximum Weekly Averages require that samples collected per calendar week are averaged and compared to the other weekly averages for that monitoring period (per parameter), so that the week with the highest average value for that parameter is reported on the DMR as the Maximum Weekly Average. Conveniently, the current Excel version of the MRO (particularly the Activated Sludge MRO) provides extra columns and automatically calculates the Weekly Average for flow, TSS, CBOD5, and Ammonia, so that each Weekly Average is displayed beside the corresponding column of daily values. And the highest weekly average (for both Loading and Concentration values) is designated at the bottom of that Weekly Average column, for easy transferal to the DMR form. Also, the current Excel versions of the State forms also employ the correct use of partial week calculations for calendar weeks with fewer than 5 days.

Report Flow accurately:
As mentioned above, flow values are generally recorded in one or both of the first two quality/loading columns. All NPDES permitted facilities should be equipped with at least an effluent flow meter, in order to provide accurate discharge flow data, although some facilities, as per their permit, are allowed to use pump rates or estimations**. If flow data cannot be reported as required by the permit (e.g., flow meter broken), an explanation must accompany the DMR form and the situation must be corrected as soon as possible**.

Most DMR forms currently have two flow parameters. The "FLOW, IN CONDUIT OR THRU TREATMENT PLANT" (#50050) should be completed with the average (daily) flow for the month (first column) and also may require the maximum (daily) average for a week or month (second column). The last flow parameter, "FLOW, TOTAL" (# 82220), should be completed with the sum total of the flow for the monitoring period the DMR represents (such as a month or a quarter), reported in million gallons, not gallons (e.g., 100,000 gallons = 0.1 million gallons). The "Flow, Total" parameter was added (except for pretreatment facilities, coal mines, and quarries) in July of 1998 for the purpose of more accurately calculating annual fees, and is always to be reported in millions of gallons per monitoring period (mg). Thus, if you report a total flow of "260,000" on the DMR (because you had 260,000 gallons for the month) but the DMR units are listed as "MGD", you just reported that you had 260,000,000,000 (260 billion) gallons of flow. **In order to receive correct annual flow fee bills, the "FLOW, TOTAL" (82220) parameter must be reported in millions of gallons**. The Flow, Total is also calculated on most of the Excel versions of the MROs/MMRs and can be easily transferred to the DMR form.

Use the Monthly Geometric Mean, not Arithmetic Average, when reporting E. coli in the average column of the DMR: Most sanitary permittees (municipal, semipublic and state-owned facilities) must already report E. coli measurements or will report E. coli on their DMRs when their permit is renewed. When E. coli is required to be reported, it should be reported as a monthly geometric mean (not a monthly arithmetic average) in the average column of the DMR. The Excel versions of the MRO forms available at the aforementioned website automatically provide geometric mean calculations for E. coli.

Please note that if a facility changes from chlorination to U.V. disinfection and this change does not cause a change to the flow of the plant and is not part of an overall replacement of the plant, a construction permit is not required. However, the Permits Section does need to be notified about the change, to modify the permit to remove chlorine sampling parameters/requirements (if applicable), and require E. coli reporting.

Complete the "No. Ex" – number of exceedances column:
Complete the number of exceedances column, near the right end of each parameter row. This should be a total of any monthly/daily/weekly/quarterly exceedances for both loading and concentration values of a parameter, depending on the frequency of sampling for that parameter.
For example: monthly average limits can only be exceeded 1/month, so there could be a total of 2 average monthly exceedances, if the monthly average concentration limit and the daily maximum (because only one sample was collected that month) was exceeded. However, if the maximum weekly average was exceeded every week in a month, there could be 4 or 5 exceedances for concentration values, alone (8-10 if all the loading calculations were exceeded each week as well). In this particular case, there could be as many as 12 exceedances.

Complete the Frequency of Analysis and Sample Type columns for each parameter sampled:
While this information is not currently keyed into the EPA database, EPA has indicated that they may begin to require the data entry of this information at a later date.

Signature, Date, Telephone Number: Complete the bottom of the DMR form by printing the name of the authorized official on the left side of the page and signing the name of the authorized official on the right side. Legibly print the date the form was completed and provide the current, working phone number of the authorized official, in case IDEM has questions about the DMR information. The forms sent to IDEM should contain original signatures and dates. In the case of revised/copies of the DMR forms, please initial changes, re-sign and date them. This is for legal purposes.

Report GLI Chlorine Measurements accurately (for GLI Permittees only)
Permittees whose facilities are located in the northern part of the state may have GLI (Great Lakes Initiative) reporting requirements for Chlorine that are different from the rest of the state. The permit footnote that corresponds to chlorine reporting will mention "GLI", if it is applicable and will also list any adjustments to the Daily Maximums, if they apply to the facility. In general, the GLI chlorine footnote states that a "0" is allowed to be used as the daily concentration value for chlorine if the actual daily chlorine measurement is < 0.06 mg/l. If it is true that the chlorine measurements for a facility are usually below 0.06 mg/l each day (thus a "0" value can be used for chlorine each of those days in order to calculate the monthly average), the final monthly average concentration for chlorine should be

below 0.01 mg/l. But it is important to remember that even though a daily value of "0" can be used to calculate the monthly average, the real chlorine measurements must be used to determine and report the Daily Maximum concentration (not 0).

Here is an example of a facility that always had Chlorine concentration values greater than the 0.01 mg/l Monthly Average concentration limit. The values that were less than 0.06 could be converted to a "0" for monthly averaging purposes:

Day	Measurement	< 0.06?	GLI value for daily chlorine measurement becomes: (when used to calculate Monthly Average)
Monday	0.05 mg/l	Yes	0
Tuesday	0.03 mg/l	Yes	0
Wednesday	0.04 mg/l	Yes	0
Thursday	0.06 mg/l	No	0.06
Friday	0.02 mg/l	Yes	0
Monday	0.05 mg/l	Yes	0
Tuesday	0.03 mg/l	Yes	0
Wednesday	0.04 mg/l	Yes	0
Thursday	0.03 mg/l	Yes	0
Friday	0.02 mg/l	Yes	0
Monday	0.05 mg/l	Yes	0
Tuesday	0.03 mg/l	Yes	0
Wednesday	0.04 mg/l	Yes	0
Thursday	0.05 mg/l	Yes	0
Friday	0.05 mg/l	Yes	0
Monday	0.06 mg/l	No	0.06
Tuesday	0.03 mg/l	Yes	0
Wednesday	0.04 mg/l	Yes	0
Thursday	0.03 mg/l	Yes	0
Friday	0.02 mg/l	Yes	0
Monday	0.05 mg/l	Yes	0
Tuesday	0.03 mg/l	Yes	0
Monthly Total			0.12

0.12/22 Days = 0.005 mg/l

Monthly Average Concentration	Daily Maximum Concentration
0.005	**0.06**

Averaging 20 zeros ("0") plus 0.12 mg/L will produce a very small number (0.005 mg/L) which can then be reported on the DMR form. But the highest actual chlorine measurement (0.06) needs to be written on the DMR when reporting Daily Maximum concentration. Thus, the two highlighted numbers above would be reported on the concentration side of the DMR form, and both are compliant with their concentration limits.

Likewise the "0" can be used to calculate Monthly Average Loading for each day that the Concentration Measurement value was <0.06 mg/L. That will usually allow the Monthly Average Loading values to be low, as well. Again, for each Daily Maximum loading value report the actual/real Daily Loading calculation value (not 0).

Note: The Daily Maximum value reported (whether Concentration or Loading) for chlorine on the DMR should never be "0". However, if all of the Daily measurements for chlorine are <0.06 mg/L, the Monthly Average reported on the DMR would be "0" (for both the Loading and Concentration Monthly Averages).

III. STATE FORMS – MONTHLY REPORT OF OPERATION (MRO) and MONTHLY MONITORING REPORT (MMR)

In Indiana, MRO forms must accompany the DMR forms for sanitary dischargers and MMR forms must accompany the DMR forms for the non-sanitary (industrial-type) dischargers. These state forms provide a better understanding of the daily operation of the permitted facility. Summary data on the MRO/MMR is used to complete the DMR form.

Choose the correct state form: There is one MMR form and several types of MRO forms available for specific Indiana NPDES facilities. The NPDES facility is responsible for choosing the correct type.

MMR (Monthly Monitoring Report) form 30530 for Industrial, Pretreatment, General, and Federal (non-sanitary) facilities

MRO (Monthly Report of Operation) types for Municipal, Semipublic, and State (sanitary) facilities:

- Activated Sludge Type Wastewater Treatment Plant
- Package Type Wastewater Treatment Plants (for <0.05 MGD flow)
- Waste Stabilization Lagoons (Regular or Controlled Discharger)
- Sequencing Batch Reactor Type Treatment Plants
- Trickling Filter or RBC Wastewater Treatment Plant
- Vertical Loop Reactor Wastewater Treatment Plant

An Excel version of each of these state forms can be obtained by going to http://www.in.gov/idem/5104.htm

Print, download, or request state forms:
These state forms (listed above) can either be printed (use the pdf choice) and hand-filled out or can be downloaded as an Excel spreadsheet and completed on computer. By using the Excel spreadsheet version, the summary data (averages, maximums, minimums, geometric means, totals, percent removals, etc.) is already calculated by the time all the daily/weekly data is entered on it. For those people who do not have access to a computer or the internet, paper copies of any of the forms can be obtained from IDEM by calling the Data Manager whose name and phone number is on the upper right hand corner of the DMR form. If a facility wishes to create its own state form the created state form must be submitted to IDEM to Don Daily and receive his approval before it can be used. Any changes made to it thereafter must also be submitted for approval. At this time IDEM expects that eventual electronic data submittal (for NPDES data) will be accomplished via the state form format.

Fully complete the state form:
Indiana rule requires that the state form (MRO or MMR) that accompanies the DMR form should be completely filled out. The **name of the facility**, the **NPDES number**, and the month/quarter (plus year) during which the data was collected must be on the form in order to credit the facility for MRO/MMR submittal for that **monitoring period**.

For sanitary (MRO) dischargers, a **raw/influent** sample should be collected/analyzed/reported every time a final sample is collected/analyzed. **Precipitation** should be listed, various types of **intermediate treatment** are noted, **bypassing**, other influent and **effluent measurements** are recorded**, sludge hauling**, tertiary treatment, various tank treatment, etc., as they apply. Average, maximum, and minimums are tallied at the bottom of the MRO/MMR columns.

Entering "Less Than" measurements on the Excel MMR/MRO:
If using the State Form as an Excel Spreadsheet, do not enter the "less than" sign ("<") for each daily parameter measurement that has one, in order for the "Average" calculation function to work. When transferring summary data from the MRO form to the DMR form the less than sign ("<") can be used on the DMR when the daily maximum and/or weekly maximum values exceed the threshold of measurement. It can even be used on the DMR for reporting averages, as long as none of the values for that month exceeded the threshold of measurement.

As long as the correct MRO form is used, every column and row that applies to the NPDES permitted facility should be completed on the MRO form for that day of the month. Likewise, every parameter that should be sampled for

non-sanitary dischargers, should be listed on the MMR form showing the date of sampling. Remember, any sampling conducted above and beyond the required permit sampling should also be displayed on the MRO. This is one of the reasons why dischargers who are only required to sample once per month, can have an average value that is different than their maximum value for parameters like Total Suspended Solids and Flow.

Provide correct signatures for the state form:
Indiana rule requires that the names of both the certified operator and the authorized agent be on the state forms. IDEM expects these names to be legibly printed and signed, and has provided additional spaces on the state form to also include information such as the telephone number, email address, certification number of the certified operator, the date of certification expiration, and the type/class of facility, etc.

Attach the state forms and any other information (i.e., a letter explaining a parameter exceedance) **to the back of the corresponding DMR form and submit** to the IDEM address listed on the first page, by the 28th of the month following the DMR Monitoring Period end date.

Please make and keep a copy of the DMR/State form and any other documents submitted, for your records.